REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussions is respectfully requested.

Claims 1-4, 6-15 and 17-21 are pending in the present application. Claims 5, 16 and 22 have been canceled and claims 1, 3, 6-14 and 17 have been amended by the present Amendment.

In the outstanding Office Action, claim 6 was rejected under 35 U.S.C. § 112, second paragraph; claims 1, 6-9, 11, 12, 17 and 18 were rejected under 35 U.S.C. § 102(e) as anticipated by Rainville et al.; claims 2, 3, 13 and 19 were rejected under 35 U.S.C. § 103(a) as unpatentable over Rainville et al. in view of Yoo et al.; claims 14 and 20 were rejected under 35 U.S.C. §103(a) as unpatentable over Rainville et al. in view of Lee; claims 4, 10, 15 and 21 were rejected under U.S.C. § 103(a) as unpatentable over Rainville et al. in view of Tsujimoto et al.; and claims 5, 16 and 22 were indicated as allowable if rewritten in independent form.

Applicant thanks the Examiner for the indication of allowable subject matter. In light of this indication, independent claims 1, 11 and 17 have been amended to include the subject matter recited in dependent claims 5, 16 and 22. Further, independent claim 7 has also been amended to include similar subject matter to that as recited in claim 5. However, independent claims 1 and 7 have not been amended to include the subject matter recited in dependent claim 4, from which claim 5 depends. However, it is respectfully submitted newly amended claims 1 and 7 including the subject matter recited in dependent claim 5 is still allowable.

Serial No. 09/989,462 Amdt. dated <u>August 9, 2004</u> Reply to Office Action of <u>May 7, 2003</u>

Accordingly, it is respectfully submitted that independent claims 1, 7, 11 and 17 and each of the claims depending therefrom are allowable and each of the rejections noted in the outstanding Office Action are moot.

Further, claim 6 has been amended to depend on claim 4, rather than on claim 1 and thus has proper an antecedent basis for the feature "the bit shifter" in line 3. Accordingly, it is respectfully requested that the rejection of claim 6 under 35 U.S.C. § 112, second paragraph be withdrawn.

In addition, the specification has been amended to correct minor informalities and to include references to each of the steps in Figure 4. Figure 4 has also been amended to correct a spelling error and the Abstract has been amended to better correspond with U.S. Patent practice. It is believe no new matter has been added.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the

application is in condition for allowance. If the Examiner believes that any additional changes

would place the application in better condition for allowance, the Examiner is invited to

contact the undersigned attorney, **David A. Bilodeau**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this,

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607

and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: August 9, 2004

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